

ABSTRACT

Aim and Objectives: To combine Doppler velocimetry and the Non Stress Test to precisely predict perinatal outcome in high risk pregnancies.

Materials & methods: This was a prospective study conducted at the Dept. of Obstetrics and Gynaecology, ISO KGH, Madras Medical College, Chennai.

200 high risk pregnancies like Anemia, Hypertensive disorders of pregnancy, GDM, IUGR, Multiple gestation etc. were included in the study. They were examined systematically and Doppler Velocimetry & Non Stress Test were done. The main vessels studied by Doppler were Umbilical Artery and Middle Cerebral Artery and the indices were calculated. The results of the Non Stress Test were interpreted as reactive and non reactive. Based on the results of Doppler and Non Stress Test, the 200 cases were categorised into four groups and the results were analysed.

Results: Among the 200 cases of high risk pregnancies, those with a normal Doppler study and a reactive Non Stress Test had good perinatal outcome. When both Doppler was abnormal and Non Stress Test was non reactive, there

was a higher percentage of adverse outcome as compared to that of either Doppler alone being abnormal or Non Stress Test alone being non reactive.

It was also found that abnormal Doppler but with a reactive Non Stress Test had cases of had the advantage of prolonging the pregnancy till term and bringing a better outcome indicating that Non Stress Test is surely a good test of well being .

When Doppler was normal, but Non Stress Test was non reactive, there was an increase in the rate of caesarean section.

Conclusion: Each method of fetal surveillance reflects different aspect of maternal and fetal pathophysiology. Hence combining these will help to bring out better perinatal outcome.

Key words: Doppler Velocimetry, Non Stress Test, High Risk Pregnancy, Perinatal outcome.